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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/685,443

10/16/2003

Isao Kobayashi

2003-1473A

5428

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7590

08/22/2006

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EXAMINER

LAMB, CHRISTOPHER RAY

ART UNIT

PAPER NUMBER

2627

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/685,443	Applicant(s) KOBAYASHI ET AL.	
	Examiner Christopher R. Lamb	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 7-14, 20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/16/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on August 1st, 2006 is acknowledged.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 5, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawamura et al. (US 6,424,614).

Regarding claim 1:

Kawamura discloses:

A method of recording data to an optical disk having a plurality of recording layers in which information can be recorded optically (column 12, lines 15-25),

wherein the optical disk has a first recording layer and a second recording layer disposed at a farther position from a light source than the first recording layer (column 12, lines 20-30),

the method comprises defining a radius of the outermost circumference of a data recordable range in the second recording layer to be equal to or less than a radius of the outermost circumference of an area in which data is recorded in the first recording layer, when recording data in the second recording layer (column 3, lines 45-55; column 4, lines 10-25: data is recorded to the same radial position on every layer).

Regarding claim 2:

In Kawamura the position of the optical head at the end of data recording in the first recording layer is the recording start position in the second recording layer (column 3, lines 45-55; column 12, lines 30-40).

Regarding claim 5:

In Kawamura a radius of the innermost circumference of the data recordable range in the second recording layer is defined to be equal to or larger than the radius of the innermost circumference of the data recorded in the first recording area (it is equal: the same amount of data is recorded on every layer, column 4, lines 10-20).

Regarding claims 15 and 18:

These are apparatus claims corresponding to method claims 1 and 5. Kawamura discloses an apparatus in Fig. 16, and that it may be used for recording in column 12, lines 15-20. All other elements of these claims have already been discussed with regards to the earlier claims.

5. Claims 1, 3-6, and 15-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Hirokane et al. (US 2002/0172113).

Regarding claim 1:

Hirokane discloses:

A method of recording data to an optical disk having a plurality of recording layers in which information can be recorded optically (Embodiment 2: paragraphs 153 to 165),

wherein the optical disk has a first recording layer and a second recording layer disposed at a farther position from a light source than the first recording layer (Fig. 10),

the method comprises defining a radius of the outermost circumference of a data recordable range in the second recording layer to be equal to or less than a radius of the outermost circumference of an area in which data is recorded in the first recording layer, when recording data in the second recording layer (Fig. 10; paragraph 154).

Regarding claim 3:

Hirokane discloses wherein the data is recorded in the optical disk in predetermined block units (data is stored in addressed units: described in, for example, paragraph 10), and when the unrecorded area of the first recording layer becomes less than the size of one block during data recording operation in the first recording layer, the data recording layer is changed over to the second recording layer without recording in the unrecorded area (data is fully recorded on the first layer, which means "until the last address," paragraph 152. This means it is recorded in every addressable unit, and when there are no more (so the unrecorded area is less than one block: i.e., zero), it moves to

the next. No other data is recorded elsewhere on the layer in the embodiment used in this rejection).

Regarding claim 4:

In Hirokane a radius of the outermost circumference of the recordable range in the second recording layer is defined to be smaller than the radius of the outermost circumference of the data recorded area in the first recording layer by a predetermined distance (Fig. 10; paragraph 154).

Regarding claim 5:

In Hirokane a radius of the innermost circumference of the data recordable range in the second recording layer is defined to be equal to or larger than the radius of the innermost circumference of the data recorded area in the first recording layer (Fig. 10; paragraph 154).

Regarding claim 6:

wherein a radius of the innermost circumference of the recordable range in the second recording layer is defined to be larger than the radius of the innermost circumference of the data recorded area in the first recording layer by a predetermined distance (Fig. 10; paragraph 154; the distance is disclosed in Fig. 9, paragraph 164).

Regarding claim 15:

Hirokane discloses:

An apparatus of recording data to an optical disk having a plurality of recording layers in which information can be recorded optically (Fig. 5, paragraph 153),

the optical disk having a first recording layer, and a second recording layer disposed at a farther position from a light source than the first recording layer (Fig. 10),

the apparatus comprising an optical head that emits a laser beam to the optical disk to record information, a driving controller that drives the optical head, and a controller for controlling the driving controller (Fig. 5),

wherein, when recording data in the second recording layer, the controller conducts a control so that a radius of the outermost circumference of a data recordable range in the second recording layer is equal to or less than a radius of the outermost circumference of an area in which data is recorded in the first recording layer (Fig. 10: paragraph 154).

Regarding claims 16-19:

These are apparatus claims corresponding to method claims 3-6. The apparatus has been discussed with regards to claim 15; all other elements have been discussed with regards to claims 3-6.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nishiuchi et al. (US 6,894,962) and Sugiyama et al. (US 5,414,451) both fully record a first layer before the second; Ishida et al. (US 5,729,525) discloses recording blocks on a first layer before blocks on a second.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Lamb whose telephone number is (572)

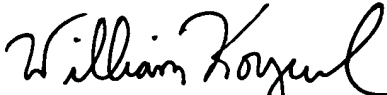
Art Unit: 2627

272-5264. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRL 8/15/06


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